

REMARKS

Claims 1-36 are pending in the application. Claims 1, 8, 16, 23, 31, and 35 are independent. No claims have been amended, canceled, or withdrawn in this Paper. A Claim Listing has been provided as a courtesy.

Rejection of Claims 1-36 Under 35 U.S.C. §112, Second Paragraph

The Examiner rejected claims 1-36 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter the Applicant regards as the invention. Applicant respectfully traverses the rejection.

The essential inquiry into a rejection under 35 U.S.C. § 112, second paragraph, indefiniteness rejection is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. MPEP §2173.02 citing *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). Definiteness of claim language must be analyzed, not in a vacuum, but in light of: a) the application disclosure, b) the teachings of the prior art, and c) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. *Id.* In reviewing a claim for definiteness, the Examiner must consider the claim as a whole to determine whether the claim appraises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. § 112, second paragraph. *Id.*

With regard to claim 1, the Examiner asserts that although claim 1 recites structure, it is not clear how the elements relate to each other to produce the optical apparatus, it is not clear how the optical apparatus functions, it is not clear how the tuning element is positioned in a light beam, it is not clear what structure positions the tuning element in the light beam, no structure has been recited to produce a light beam, no recitation that the light beam is coherent, it is not clear how the drive element is magnetically coupled to the tuning element, it is not clear what does the drive element drive, and it is not clear what does the fact that the drive element is magnetically coupled have to do with the tuning element, and as such claim 1 is rendered indefinite.

Applicant respectfully directs the Examiner's attention to Figures 1A and 1B, which illustrate how the tuning element 12 is related to the light beam 18, the drive element 14, and the magnetic elements 22 and 24 to produce the optical apparatus 10 according to an embodiment of the present invention. Applicant respectfully directs the Examiner's attention to paragraphs 0034-0035 of Applicant's Specification, which describes in detail how the laser apparatus 10 functions according to at least one embodiment of the present invention. Applicant respectfully directs the Examiner's attention to Figures 1A and 1B, which illustrate how the tuning element 12 is positioned in a light beam 18 according to an embodiment of the present invention.

Applicant respectfully directs the Examiner's attention to paragraphs 0034-0035 of Applicant's Specification, which describes in detail that the drive element 14 positions the tuning element 12 in the light beam 18 according to an embodiment of the present invention. Applicant further directs the Examiner's attention to paragraphs 0009 of Applicant's Specification, which describes in detail a gain medium emitting a coherent light beam according to an embodiment of the present invention. Applicant respectfully directs the Examiner's attention to Figures 1A and 1B, which illustrate that the drive element 14 is magnetically coupled to the tuning element 12 using the magnets 22 and 24 according to an embodiment of the present invention. Applicant respectfully directs the Examiner's attention to Figures 1A and 1B, which illustrate that the drive element 14 drives the tuning element 12 according to an embodiment of the present invention. Applicant further direct the Examiner's attention to paragraphs 0026 of Applicant's Specification, which describes in detail what the fact that the drive element is magnetically coupled have to do with the tuning element according to an embodiment of the present invention.

With regard to claim 8, the Examiner asserts that it is not clear how the tuning element is positioned in a light beam, what structure positions the tuning element in a light beam, no structure has been recited to produce a light beam, the Examiner asks whether the light beam is coherent, the Examiner asserts that it is not clear that a gain medium exclusive of a pump will produce a light beam and that since a gain medium is being claimed the light beam must be coherent, and it is not clear how the second magnetic element is actuated.

Applicant respectfully directs the Examiner's attention to Figures 1A and 1B, which illustrate how the tuning element 12 is positioned in the light beam 18. Applicant further directs

the Examiner's attention to paragraphs 0009 of Applicant's Specification, which describes in detail a gain medium emitting a coherent light beam according to an embodiment of the present invention. Applicant further directs the Examiner's attention to paragraph 0027 of Applicant's Specification, which describes in detail that the gain medium 16 may be a Fabry-Perot diode emitter chip in an embodiment of the present invention. Applicant respectfully request clarification as to why the Examiner believes that a pump must be specifically recited in claim 8. Applicant further directs the Examiner's attention to paragraphs 0048 of Applicant's Specification, which describes in detail how the second magnetic element is actuated according to an embodiment of the present invention.

With regard to claim 3, the Examiner asserts that it is not clear that the first magnetic element is different from the magnetically coupled tuning element of claim 1 and it is not clear how the second magnetic element is associated with the drive. Applicant respectfully directs the Examiner's attention to Figures 1A and 1B, which illustrate that first magnetic element 22 is different from the tuning element 12 according to an embodiment of the present invention. Applicant further direct the Examiner's attention to paragraph 0048 of Applicant's Specification, which describes in detail how the second magnetic element is associated with the drive 20 according to an embodiment of the present invention.

With regard to claims 4 and 16, the Examiner asserts that it is not clear that a gain medium exclusive of a pump will produce a light beam and that since a gain medium is being claimed the light beam must be coherent. Applicant further directs the Examiner's attention to paragraph 0027 of Applicant's Specification, which describes in detail that the gain medium 16 may be a Fabry-Perot diode emitter chip in an embodiment of the present invention. Applicant respectfully request clarification as to why the Examiner believes that a pump must be specifically recited in claims 4 and 16.

With regard to claims 5, 10 and 16, the Examiner asserts that it is not clear what the positioning of the reflector after the tuning element has to do with the device as a whole and asks whether Applicant are simply claiming the arrangement of elements. Applicant further direct the Examiner's attention to paragraph 0037 of Applicant's Specification, which describes in detail

what the positioning of the mirror 26 after the tuning element 12 has to do with the laser apparatus 10 as a whole according to an embodiment of the present invention.

With regard to claim 6, the Examiner asserts that it is not clear how the grid generator is associated with a light beam or how it is configured to define a channel grid. Applicant further direct the Examiner's attention to Figures 1A and 1B of Applicant's Specification, which illustrate in detail how the grid etalon 34 is associated with the light beam 18 according to an embodiment of the present invention. Applicant further direct the Examiner's attention to paragraphs 0028-0029 of Applicant's Specification, which describes in detail how the grid etalon 34 is configured to define a channel grid according to an embodiment of the present invention.

With regard to claim 7, the Examiner asserts that it is not clear how the specific collection of elements' connectivity relate to the device as a whole or whether Applicant are simply claiming the specific arrangement of elements. Applicant further direct the Examiner's attention to Figures 2 and 3 and to paragraphs 0040-0044 of Applicant's Specification, which illustrate in detail how the hermetically sealed enclosure 52, the gain medium 16, the tuning element 12, and the mirror 26 are related to the laser apparatus 53 as a whole according to an embodiment of the present invention.

With regard to claims 13 and 20, the Examiner asserts that it is not clear how the activated carbon drain functions in the device as a whole. Applicant further direct the Examiner's attention to paragraph 0046 of Applicant's Specification, which illustrate in detail how the activated carbon drain 88 functions in the external cavity laser apparatus 76 as a whole according to an embodiment of the present invention.

With regard to claims 14 and 21, the Examiner asserts that it is not clear how the moisture trap functions in the device as a whole. Applicant further direct the Examiner's attention to paragraph 0046 of Applicant's Specification, which illustrate in detail how the activated moisture trap 90 functions in the external cavity laser apparatus 76 as a whole according to an embodiment of the present invention.

With regard to claims 23 and 31, the Examiner asserts that since there is no method step recited that will pump the gain medium it is not clear how the method for operating a laser is achieved. Applicant direct the Examiner's attention to paragraphs 0034-0037 of Applicant's Specification, which illustrate in detail how the method for operating a laser is achieved according to an embodiment of the present invention. Applicant further directs the Examiner's attention to paragraph 0027 of Applicant's Specification, which describes in detail that the gain medium 16 may be a Fabry-Perot diode emitter chip in an embodiment of the present invention. Applicant respectfully request clarification as to why the Examiner believes that a pump must be specifically recited in claims 23 and 31.

With regard to claim 35, the Examiner asserts that it is not clear what type of beam is being claimed, what effect actuating the tuning element in a non-coherent beam would have, and how the tuning element functions in the device. Applicant direct the Examiner's attention to paragraph 0027 of Applicant's Specification, which describes in detail that the gain medium 16 may be a conventional Fabry-Perot diode emitter chip in an embodiment of the present invention. Applicant therefore respectfully submits that it is known how a conventional Fabry-Perot diode emitter chip operates and no further description is needed. Applicant respectfully request clarification as to why the Examiner is asking Applicant to recite "results language" in claim 35 to recite what effect actuating the tuning element 12 in a non-coherent beam would have. Applicant respectfully directs the Examiner's attention to paragraphs 0034-0035 of Applicant's Specification, which describes in detail how the tuning element 12 functions in the laser apparatus 10 according to an embodiment of the present invention.

Applicant respectfully submit that the claim language read in conjunction with at least the above Specification teachings sufficiently apprises with reasonable clarity and particularity, to one of ordinary skill in the art, the scope of claim 1, 3-8, 10, 13-14, 16, 20-21, 23, 28, 31, and 35. Accordingly, Applicant submit claims 1, 3-8, 10, 13-14, 16, 20-21, 23, 28, 31, and 35 are patentable as written and respectfully request that the Examiner reconsider and withdraw the rejections.

Claims 2, 9, 11-12, 15, 17-19, 22, 24-27, 29-30, 32-34, and 36 properly depend from patentable claims and therefore are patentable as well. Accordingly, the Applicant respectfully

request that the Examiner reconsider and withdraw the rejection of claims 2, 9, 11-12, 15, 17-19, 22, 24-27, 29-30, 32-34, and 36.

Additionally, Applicant respectfully submit that the Examiner has improperly grouped claims 2, 9, 11-12, 15, 17-19, 22, 24-27, 29-30, 32-34, and 36 in an omnibus rejection because the Examiner has not provided any ground for rejecting each of the individual claims in the group 2, 9, 11-12, 15, 17-19, 22, 24-27, 29-30, 32-34, and 36 in violation of MPEP §707.07(d). Accordingly, Applicant respectfully requests that the Examiner provide a basis for rejection of the claims 2, 9, 11-12, 15, 17-19, 22, 24-27, 29-30, 32-34, and 36 individually.

CONCLUSION

Applicant respectfully submits that all grounds for rejection have been properly traversed and that the application is now in condition for allowance. The Examiner is invited to telephone the undersigned representative if the Examiner believes that an interview might be useful for any reason.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date:

August 30, 2004

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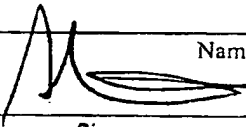
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